

To: Washburn, Ben[washburn.ben@epa.gov]
From: Sanders, LaTonya
Sent: Mon 11/24/2014 10:22:41 PM
Subject: RE: OPA Daily Digest 11/24/14

Hi Ben,

The congressional inquiry was listed as closed in last Friday's daily digest.

Thanks.

From: Washburn, Ben
Sent: Monday, November 24, 2014 4:19 PM
To: R7 Daily Digest Group
Subject: OPA Daily Digest 11/24/14

OPA Daily Digest for 11/24/14

Congressional Inquiries:

Sen. Tim Scott (SC) – Letter – 10/30/14: Constituent complaint about a biosolids public odor issue involving GenEarth Company in Moncks Corner, SC. (R7 operates EPA's National Biosolids Center of Excellence). Due: 11/14/14. Contact: LaTonya Sanders, 7555 (closed)

State Government Inquiries:

None

Press Inquiries:

Wall Street Journal – John Emshwiller – 10/31/14: Questions regarding West Lake site in Bridgeton, Mo. Contact: Ben Washburn, 7364 (open)

KSN-TV (Wichita) – Darren Dedo – 11/17/14: Requesting status updates and interviews for Wichita Superfund sites. Contact: Ben Washburn, 7364 (open)

St. Louis Post-Dispatch - Jacob Barker – 11/21/14: Requesting interview about West Lake Landfill. Contact: Ben Washburn, 7364 (open)

Environmental Stories:

Associated Press - Attorney says Ferguson grand jury announcement Monday - 11/24/14 - A lawyer for Michael Brown's family says they have been notified that the grand jury considering whether to indict a Ferguson police officer his shooting death has made a decision. ABC News reports the announcement will happen at 7 p.m. CST. <http://www.kake.com/home/headlines/Reports--Ferguson-grand-jury-reaches-decision-283730961.html>

Associated Press - Des Moines again struggling with nitrates in water - 11/21/14 - Two rivers that supply water to 500,000 people in the Des Moines area show nitrate levels spiking to levels that make it unsafe for some to drink, a concentration experts haven't before seen in the fall that likely stems from especially wet weather in recent months. http://www.omaha.com/news/iowa/des-moines-struggling-with-nitrates-in-water/article_0b201d43-53a9-548f-9543-2bfe32b46743.html

St. Louis American - Mothers outraged at EPA's response on West Lake landfill - 11/21/14 - A group of mothers who live near the West Lake landfill in North St. Louis County were outraged at a recent letter from an Environmental Protection Agency official, who claimed that the agency has no authority to relocate families affected by the landfill that contains radioactive waste. http://www.stlamerican.com/news/local_news/article_fede1aa8-71ad-11e4-b287-0be5be584fff.html

St. Louis Public Radio - Missouri Has Much At Stake As EPA Nears Deadline For Regulating Coal Ash - 12/23/14 - After four years and a court order that pitted environmental groups against the coal industry, the Environmental Protection Agency is nearing its December deadline to finalize regulations for how coal-fired power plants dispose of the toxic ash they create. <http://news.stlpublicradio.org/post/missouri-has-much-stake-epa-nears-deadline-regulating-coal-ash>

Cedar Valley Business (Iowa) - Proposed wind-energy transmission line jolts some farmers - 11/23/14 - Controversy is swirling like a tempest across the prairie as a Texas-based company plans to invest billions of dollars in Iowa's emerging wind-energy sector to transmit power out of the state to the East Coast. http://wcfcourier.com/business/local/proposed-wind-energy-transmission-line-jolts-some-farmers/article_4c19e2a0-cd2b-580a-978a-d20978783942.html

Greenwire - Public health groups sue EPA over state compliance on lead standards - 11/21/14 - Public health groups sued U.S. EPA yesterday for failing to take action to bring six states and Puerto Rico into compliance with air standards for lead. For two areas of nonattainment -- Pottawattamie, Iowa, and Arecibo, Puerto Rico -- implementation plans were not submitted, the lawsuit states. <http://www.eenews.net/greenwire/stories/1060009419/>

Lincoln Journal Star (Neb.) - Editorial: Pipeline foes winning -- and losing - 11/22/14 - Opponents of the Keystone XL pipeline have been victorious so far in stalling the project. However, the successive victories by pipeline opponents are looking increasingly hollow. http://journalstar.com/news/opinion/editorial/editorial-pipeline-foes-winning---and-losing/article_ffa998b9-0f70-517d-878f-52cc4295ba2e.html

Associated Press - Davenport has its first permeable street - 11/24/14 - Davenport's new two-block-long permeable street is undergoing the ultimate endurance test — an early and bitter start to what could be a long winter. http://qctimes.com/news/state-and-regional/iowa/davenport-has-its-first-permeable-street/article_29b78b5b-49b6-5fc4-9207-9cdabbbe09fc.html

Associated Press - Iowa farmers question proposed transmission line - 11/24/14 - A proposed 500-mile transmission line to carry electricity from wind turbines in northwest Iowa to customers in Illinois is encountering significant resistance from farmers and other landowners across the state. http://qctimes.com/news/state-and-regional/iowa/iowa-farmers-question-proposed-transmission-line/article_98e2ef4c-4957-5192-a862-edb63269702c.html

Radio Iowa - Ethanol backers pleased with EPA pull back on renewable fuel standard - 11/21/14 - Supporters of renewable fuels in Iowa say they are pleased with the announcement by the U.S. Environmental Protection Agency that they are delaying their decision on a proposal that would have dramatically cut the amount of renewable fuels required to be used in the country. <http://www.radioiowa.com/2014/11/21/ethanol-backers-pleased-with-epa-pull-back-on-renewable-fuel-standard/>

Investor Ideas - Iowa Biodiesel Board looks for silver lining in EPA announcement - 11/21/14 - At the news of this delay, we're hopeful it could indicate that EPA might be taking the time to revise its proposal. An increased RVO for biomass-based diesel would mean good news for Iowa, the number one biodiesel-producing state. <http://www.investorideas.com/news/2014/renewable-energy/11211.asp>

Joplin Globe - Public comment opens on proposed utility landfill at Asbury - 11/21/14 - Brenda Polen and her husband, Don, of Asbury, were among a handful of people who turned out for an informational meeting Thursday night on the proposed construction of a utility-waste landfill at the Empire District Electric Co. Asbury Power Plant. Empire is installing pollution-control equipment on the power plant that will capture coal combustion byproducts, such as fly ash. Those byproducts are to be placed in the landfill. http://www.joplinglobe.com/news/local_news/public-comment-opens-on-proposed-utility-landfill-at-asbury/article_522e5692-7ee4-5864-861a-d3cc05c2e641.html

Sioux Falls Argus Leader (S.D.) - Utility rates rising, but so is energy efficiency - 11/22/14 - Xcel Energy, MidAmerican Energy want to raise rates, but energy-saving devices are cheaper. <http://www.argusleader.com/story/news/2014/11/23/utility-rates-rise-energy-efficiency/19435353/>

Maryville Daily Forum (Mo.) - Missouri lacks push for safer hunting bullets - 11/22/14 - Missouri hunters likely will use lead bullets during firearm deer season this year despite potential health complications from the metal. http://www.maryvilledailyforum.com/news/state_news/article_f0fd0e4d-2bb8-51f2-a4ae-649f46e328ff.html

Columbia Missourian - Proposed Dredging Operation Again Draws Opposition - 11/22/14 - Six months after initially being denied a conditional use permit to dredge for aggregate along the Meramec River near St. Clair, Havin Material Service, Inc. was back making its case in front of the Franklin County Planning and Zoning Commission. http://www.emissourian.com/local_news/county/proposed-dredging-operation-again-draws-opposition/article_2e09c3dd-8718-502b-8265-377821ac5480.html

Farms - U.S. EPA Postpones Decision Setting 2014 Renewable Fuel Objectives - 11/22/14 - The battle between the Renewable Fuels industry and oil industry over how much ethanol must be blended has been brought to center stage by the U.S. government's inability to set the RFS mandates. <http://www.farms.com/ag-industry-news/u-s-epa-postpones-renewable-fuels-decision-363.aspx>

Los Angeles Times - White House threatens to put brakes on alternative fuels - 11/24/14 - As biotech masterminds and venture capitalists scramble to hatch a new generation of environmentally friendly fuels that can help power the average gasoline-burning car, they are confronting an unexpected obstacle: the White House. <http://www.latimes.com/nation/la-na-fuel-fight-20141124-story.html>

Farm Industry News - EPA's announcement on RFS, "short term victory," ACE's Jennings says - 11/22/14 - Yesterday's announcement from the EPA stating that it would postpone final ruling on 2014 renewable volume obligations in the RFS until next year was a pleasant surprise, said Brian Jennings, executive vice president, American Coalition for ethanol, adding "We had been bracing for the EPA to completely rewrite the RFS." <http://farmindustrynews.com/blog/epa-s-announcement-rfs-short-term->

[victory-ace-s-jennings-says](#)

Domestic Fuel - Iowans Weigh in on EPA's RFS Delay - 11/24/14 - With Iowa being one of the nation's leaders in ethanol and biodiesel production, it's no wonder state officials and industry groups joined the national chorus weighing in the Environmental Protection Agency (EPA) decision to once again delay a final decision on the 2014 Renewable Fuel Standard (RFS) until next year.

<http://domesticfuel.com/2014/11/24/iowans-weigh-in-on-epas-rfs-delay/>

AgWeb - Big Ag, Big Difference: Communicating Our Objectives for Sustainable Agriculture -

11/21/14 - If you ask a third-generation farmer when this new sustainable farming trend emerged, he'll look down at his boots and say, "It's always been here." However, the fact remains that a significant portion of the general public thinks it's new.

[http://www.agweb.com/blog/future of food/big ag big difference communicating our objectives for sustainable agricu](http://www.agweb.com/blog/future_of_food/big_ag_big_difference_communicating_our_objectives_for_sustainable_agricu)

The Weekly Standard (blog) - Biofuels and the Do-Nothing EPA - 11/21/14 - Policy makers should take note that despite the distraction of the RFS, the market ultimately prevailed, and EPA will be left to merely certify what happened in 2014 sometime later in 2015. The RFS, as has been shown, is not needed. http://www.weeklystandard.com/blogs/biofuels-and-do-nothing-epa_819751.html

Agri-Pulse - EPA says it will not act on 2014 RFS until 2015, industry offers mixed reactions - 11/21/14 - Lawmakers and industry representatives offered mixed reactions to the delayed ruling, saying it could give EPA more time to come up with a firm ruling, but others expressed frustration with the continued delays. <http://www.agri-pulse.com/EPA-says-it-wont-act-on-RFS-until-2015-industry-offers-mixed-reactions-112114.asp>

Washington Post (blog) - Two charts that show how Americans view key federal agencies -

11/24/14 - You've seen what federal employees think of their agencies – a recent survey of the workers showed low confidence in senior leaders and declining morale. But what about the general public? How do Americans view the federal government? <http://www.washingtonpost.com/blogs/federal-eye/wp/2014/11/24/two-charts-that-show-how-americans-view-key-federal-agencies/>

Yale e360 - Analysis: Can Green Bonds Bankroll A Clean Energy Revolution? - 11/24/14 - To slow global warming, tens of trillions of dollars will need to be spent in the coming decades on renewable energy projects. Some banks and governments are issuing green bonds to fund this transformation, but major questions remain as to whether this financing tool will play a game-changing role. http://e360.yale.edu/feature/can_green_bonds_bankroll_a_clean_energy_revolution/2829/

Environmental Leader - EPA Delays Renewable Fuel Mandate - 11/24/14 - In September, a Biotechnology Industry Organization white paper warned the EPA's inaction on finalizing the 2014 rule

would lead to increased greenhouse gas emissions of 21 million metric tons CO2 equivalent. BIO, in response to the EPA's Friday announcement, said the decision to punt the RFS final rule to 2015 "continues the atmosphere of uncertainty for the advanced biofuel industry."
<http://www.environmentalleader.com/2014/11/24/epa-delays-renewable-fuel-mandate/>

Reuters - Any Climate Deal From Upcoming Summit Likely To Be Too Weak To Stop Warming - 11/23/14 - A global deal to combat climate change in 2015 looks more likely after promises for action by China, the United States and the European Union, but any agreement will probably be too weak to halt rising temperatures. http://www.huffingtonpost.com/2014/11/23/climate-deal- n_6206798.html

The Hill (blog) - Federal action needed to tame airline's high-flying climate pollution - 11/22/14 - Greenhouse emissions from aviation are rising rapidly, even as scientists explain that we're running out of time to avoid disastrous global warming effects, from dangerous temperature increases to food-supply disruptions. <http://thehill.com/blogs/congress-blog/energy-environment/225066-federal-action-needed-to-tame-airlines-high-flying>

The Hill - Fuel manufacturer threatens to sue EPA over renewable fuel standard - 11/21/14 - A major fuel manufacturer is threatening to sue the Environmental Protection Agency for failing to issue the final 2014 renewable fuel standard (RFS). <http://thehill.com/policy/energy-environment/224997-fuel-manufacturer-threatens-to-sue-epa-over-renewable-fuel-mandate>

New York Times - Solar and Wind Energy Start to Win on Price vs. Conventional Fuels - 11/23/14 - For the solar and wind industries in the United States, it has been a long-held dream: to produce energy at a cost equal to conventional sources like coal and natural gas. That day appears to be dawning. <http://www.nytimes.com/2014/11/24/business/energy-environment/solar-and-wind-energy-start-to-win-on-price-vs-conventional-fuels.html>

Associated Press - Report: Wind power saves \$1.2 billion each year - 11/24/14 - The American Wind Energy Association analyzed hourly data from the Southwest Power Pool in 2013 and says that wind power saved electricity customers in Oklahoma and surrounding states more than \$1.2 billion last year. <http://news.yahoo.com/report-wind-power-saves-1-201530999.html>

Wall Street Journal - Utilities Press Railroad to Speed Coal Deliveries - 11/23/14 - Saying they are running short on coal, electric utilities from Minnesota to Texas are trying to pressure Warren Buffett's BNSF Railway Co. to speed up deliveries on its congested tracks before the worst of the winter weather hits. <http://online.wsj.com/articles/utilities-press-railroad-to-speed-coal-deliveries-1416786948>

24/7 Wall Street - EPA Delays Renewable Fuels Decision - 11/23/14 - The U.S. Environmental Protection Agency (EPA) on Friday announced that it would not issue a final standard for the percentage

of renewable fuels use in 2014. The standard was due in November 2013 and a delay beyond the end of this year indicates that the agency is really stuck for an answer. <http://247wallst.com/energy-economy/2014/11/23/epa-delays-renewable-fuels-decision/>

Bloomberg - Obama's Punt on Renewable Fuel Sets Up Fights in Court, Congress - 11/21/14 - The Obama administration's decision to put off this year's quotas for using renewable fuels sets up fights in Congress and the courts over a program that has been bitterly contested for nearly a decade. <http://www.bloomberg.com/news/2014-11-21/renewable-fuels-proposal-for-2014-withdrawn-by-epa-after-delay.html>

Fuel Fix - Obama's punt on renewable fuel sets up fights in court, congress - 11/22/14 - The Obama administration's decision to put off issuing quotas for the use of renewable fuels this year sets up fights in Congress and the courts over a program that's been bitterly contested for nearly a decade. <http://fuelfix.com/blog/2014/11/22/obamas-punt-on-renewable-fuel-sets-up-fights-in-court-congress/>

Politics USA - The House That Kochs Bought Passes Bill Muzzling EPA Scientists - 11/22/14 - There is a reason two specific groups hate science and it is either because it debunks their superstition and mythos, or exposes their dirty industry practices as detrimental to the nation's security and the people's health. <http://www.politicususa.com/2014/11/22/house-kochs-bought-passes-bill-muzzling-epas-real-scientists.html>

Wall Street Journal - Does 'Clean Coal' Technology Have a Future? - 11/23/14 - The mix of energy sources used to produce electricity is changing—slowly. Coal is still king and is expected to retain that title for decades, giving ground only gradually to renewable fuels, natural gas and nuclear power. <http://online.wsj.com/articles/does-clean-coal-technology-have-a-future-1416779351>

NOTE: Paywall issues may keep you from seeing this article. Full text is included at the end of this email.

Press Releases:

Link to all R7 press releases: <http://go.usa.gov/Qx5>

None

Fact Sheets:

Link to all R7 fact sheets: <http://www.epa.gov/region7/factsheets>

None

Upcoming Administrator/RA Events:

* New additions noted with an asterisk

12/2-3/14 – Attend the Four State Director's Meeting, Regional Office. Contact: Dick Sumpter, 7661

12/15-16/14 – Joint Region 7 & Region 8 Ag Meeting, Denver, Colo. Contact: Damon Frizzell, 7560

DRA:

12/2-3/14 – Attend the Four State Director's Meeting, Regional Office. Contact: Dick Sumpter, 7661

RA/Immediate Office

None

Other Events

AWMD

None

CNSL

None

ECO/EJ

None

ENSV

None

PLMG

12/02/14 - Federal Executive Board & Chamber of Commerce Small Business Networking Event, Kansas City, MO. Contact: Chester Stovall, x7549

12/09/14 – Society of American Military Engineers National Conference, Kansas City, MO. Contact: Chester Stovall, x7549

RA/OPA

None

SUPR

12/2/14 – A public availability session for the Beatrice Former Manufactured Gas Plant Site in Beatrice, Neb. Contacts: Pamela Houston, 7699 & Owens Hull, 7226.

WWPD

11/23-25/14 – Information Booth at Kansas Association of Conservation Districts Annual Convention, Wichita, Kan. Contact: Steve Schaff, 7447

12/2-3/14 – Four State Directors' Meeting, Regional Office. Contact: Karen Flournoy, 7782

12/9/14 – Meeting with Iowa Department of Natural Resources, Des Moines, Iowa. Contact: Karen Flournoy, 7782

12/15-16/14 – Joint Region 7 & Region 8 Ag Meeting, Denver, Colo. Contact: Karen Flournoy, 7782

12/8-12/14 – EPA Water Quality Standards Academy training, Washington, DC. Contact: Pete Davis, 7372

Wall Street Journal

Does ‘Clean Coal’ Technology Have a Future?

Howard Herzog Says Innovation Will Deliver; Richard Heinberg Says the Economics Won't Work

11/23/14

The mix of energy sources used to produce electricity is changing—slowly. Coal is still king and is expected to retain that title for decades, giving ground only gradually to renewable fuels, natural gas and nuclear power.

Coal will account for 39% of global net electricity generation next year and 36% in 2040, according to projections by the U.S. Energy Information Administration.

Many people would like to see that number drop more dramatically. With concerns mounting about the effect of greenhouse gases on the global climate, pressure is growing for utilities to reduce carbon-dioxide emissions in their power production.

The power industry has responded in part by increasing its use of renewable energy sources. But it also continues to pursue another idea to help address environmental concerns: clean up coal-fired power plants. Technology that achieves that by capturing most of the carbon dioxide in a plant's emissions and then liquefying it for underground storage or for commercial use is just starting to be implemented.

Proponents of renewable fuels want utilities to focus instead on investing much more heavily in wind and solar power. The many billions of dollars it would take to implement clean-coal technology on a global

scale won't do enough to lessen coal's environmental impact, they argue. That money, they say, should be going toward speeding the arrival of renewable energy as the new king of power generation.

Howard J. Herzog, senior research engineer at the MIT Energy Initiative at the Massachusetts Institute of Technology, says clean coal has an important role to play in the future of power generation. Richard Heinberg, a senior fellow-in-residence at the Post Carbon Institute, argues that investment should be directed instead to renewable energy sources.

Yes: Innovative Technology Will Rise to the Challenge

By Howard J. Herzog

People have questioned the idea of clean coal for decades. It started with doubts about cleaning up particulate matter in power-plant emissions, then sulfur dioxide and nitrogen oxides, and it continues with skepticism about eliminating heavy metals like mercury.

Despite the naysayers, technology and innovation have risen to the challenge by providing effective and affordable solutions. Now, the challenge is to reduce coal's carbon-dioxide emissions. If history is any guide, innovative technology will once again provide the solutions.

The key technology needed to drastically reduce CO₂ emissions from coal-fired power plants is carbon capture and storage, or CCS. All of the components of this system are in commercial operation today. At this point, they are employed mostly to enhance oil recovery. There are about 4,000 miles of pipeline in the U.S. transporting tens of millions of tons of compressed CO₂ annually, mostly from natural wells, for injection into geologic formations to help extract oil. Numerous demonstration projects have shown that captured CO₂ also can be safely and effectively stored in deep geologic formations, as most of it will be.

Last month brought an important milestone: SaskPower's Boundary Dam power plant in Canada officially opened as the world's first commercial-scale coal power plant with CCS. About 90% of the plant's CO₂ is captured and piped about 40 miles for injection into oil fields. Next year, the Mississippi Power unit of Southern Co. will start operating a new clean-coal plant, and construction has just started on a clean-coal power plant in Texas. Other projects are being planned, most prominently in the U.S., U.K. and China.

Clean coal will become more common because climate policy will demand cleaner power. For instance, an emissions restriction on coal-fired power plants in Canada was a major driver for the Boundary Dam project. There will be added costs to power providers. But clean coal won't be so expensive that it can't compete with renewable or nuclear resources. All three will find significant markets. Yes, clean coal will require massive infrastructure investments on a global scale—but so will a major expansion of renewable-energy projects. For the electricity price of the Cape Wind project in Massachusetts, we could easily build

a clean-coal plant with CCS.

A recently released assessment of the Intergovernmental Panel on Climate Change showed that clean-coal projects are projected to be competitive in a low-carbon world, and that excluding CCS from a mitigation-technology portfolio would more than double the cost of achieving climate-stabilization goals through 2100.

Selling captured carbon for enhanced oil recovery can help reduce the cost of CCS. And new technologies under development could allow carbon to be captured with dramatically lower expenditure of energy.

As for coal being a finite resource, that isn't a factor in the near term. We have centuries of coal supply. It is true that coal production in the U.S. has dipped recently, but this is due to competition from low-price natural gas. It has nothing to do with depletion.

Meanwhile, CCS isn't the only road to clean coal. State-of-the-art coal-fired power plants are being built with much higher efficiencies that result in a 20% reduction in CO₂ emissions per kilowatt-hour of electricity produced. And other technologies and regulations are mitigating the impacts of coal mining.

If you want to understand the energy industry, you must understand the power of innovation and technology. Instead of the oil shortages that some predicted, we have an oil glut thanks to technology. Many experts thought you couldn't profitably produce oil and gas from shale; technology proved otherwise. And it is because of technology that I'm optimistic about the future of clean coal.

Mr. Herzog is senior research engineer at the MIT Energy Initiative at the Massachusetts Institute of Technology. He can be reached at reports@wsj.com.

No: The Economics Simply Don't Work—and Will Get Worse

By Richard Heinberg

For years, Americans have seen commercials touting "clean coal," while politicians on both sides of the aisle have extolled its promise. The technology to capture carbon emissions from coal-fired power plants has been tried and tested. Yet today almost none of the nation's coal-fueled plants are "clean."

Why the delay? The biggest problem for “clean coal” is that the economics don’t work. Carbon capture and storage, or CCS, is extremely expensive. That gives the power industry little incentive to implement it in the absence of a substantial carbon tax.

Why would implementing CCS be so expensive? For starters, capturing and storing the carbon from coal combustion is estimated to consume 25% to 45% of the power produced, depending on the approach taken. That translates to not only higher prices for coal-generated electricity but also the need for more plants to serve the same customers. Other technologies designed to make carbon capture more efficient aren’t commercial at this point, and their full costs are unknown.

And there’s more. Capturing and burying just 38% of the carbon released from current U.S. coal combustion would entail pipelines, compressors and pumps on a scale equivalent to the size of the nation’s oil industry. And while bolting CCS technology onto existing power plants is possible, it is inefficient. A new generation of plants would do the job much better—but that means replacing roughly 600 current-generation power plants.

The discussion of CCS technology in a recent assessment by the Intergovernmental Panel on Climate Change contains too many qualifiers to be interpreted as a declaration that clean coal will be competitive with renewable fuels.

Long term, the economics of coal are likely to get worse, with or without CCS. Coal is nonrenewable, finite in quantity and therefore subject to depletion. Rates of production from most regions of the U.S. are in decline. And as depletion forces the mining of lower-quality resources, production prices will rise because of the need for more-sophisticated extraction technologies. Declining output is inevitable sooner or later.

Meanwhile, the price of electricity produced from solar and wind power is steadily dropping. The only thing that keeps coal-based electricity cheap today in relation to power from renewable sources is the industry’s ability to shift the hidden costs—environmental and health damage—onto society. If, as climate regulations inevitably kick in, the coal power industry adopts CCS as a survival strategy, any lingering economic advantage over wind and even solar will disappear.

CCS also doesn’t address the full range of coal’s impact on society. It won’t banish high rates of lung disease, because it doesn’t eliminate all the pollutants from the combustion process or deal with the coal dust from mining and transport. It also doesn’t address the environmental devastation of “mountaintop removal” mining.

This is not to say that “clean coal” has no future whatever. Coal plants with CCS will be built where captured carbon dioxide can be used to generate extra income—for example, by using it to stimulate old

oil wells or make cement. But even a dramatic increase in such uses would put only a small fraction of carbon from coal to work.

A full transition of today's coal power industry to CCS is extremely unlikely unless the economics substantially change for some currently unforeseeable reason. And other technological advances, like more-efficient coal-fired plants, can only slow the growth of harmful emissions at best.

In all likelihood, the real future lies elsewhere—with distributed renewable energy.

Mr. Heinberg is a senior fellow-in-residence at the Post Carbon Institute, an advocate for renewable fuels. He can be reached at reports@wsj.com.

Benjamin M. Washburn

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